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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,920	10/06/2003	Steven J. Terrell	234-0002US	2909

29855 7590 12/22/2004

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EXAMINER

VALENTI, ANDREA M

ART UNIT

PAPER NUMBER

3643

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/679,920

Applicant(s)

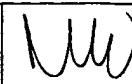
TERRELL, STEVEN J.

Examiner

Andrea M. Valenti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-14,17-32,34-44,46,47,55-69,72 and 73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-14,17-32,34-44,46,47,55-69,72 and 73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1,3-14,17-32,34-44,46,47,55-69,72 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,501,257 to Hickman in view of U.S. Patent No. 6,643,933 to David and U.S. Patent No. 5,220,773 to Klaeger.

Regarding Claims 1, 55, 56, and 72, Hickman teaches an apparatus for trimming vegetation, comprising: at least one saw blade (Hickman #71a) for trimming the vegetation, but is silent on a sprayer for spraying a chemical treatment on the vegetation in the proximity of the at least one saw blade. However, David teaches a trimming device with a plurality of sprayer nozzles for spraying chemical treatment (David #24). It would have been obvious to one of ordinary skill in the art to modify the teachings of Hickman with the teachings of David to prevent the spread of fungus as taught by David (David Col. 1 line 13-15).

Hickman as modified by David teaches the chemical treatment is directed in a plane that is perpendicular to the plane of the saw blade, but is silent on the nozzles directing the chemical treatment generally parallel with the plane of the at least one saw blade. However, Klaeger teaches an apparatus for trimming and chemically treating vegetation where the chemical treatment is directed in a plane generally parallel to the plane of the at least one saw blade (Klaeger Fig. 1 #306 and Col. 11 line 63-68 and Col. 12 line 1-13; although Fig. 1 is not explicitly clear it is the examiner's view that the nozzle of Kleager has to be oriented in a parallel fashion because element #88 prevents it from being oriented in a perpendicular fashion). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Hickman as modified by David

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since David and Klaeger teach it that it is notoriously well-known in the art to have spray nozzles positioned in various orientations. The orientation is an obvious design choice for one of ordinary skill in the art depending on the plant variety being cut, the density of the vegetation, etc. The selection of the orientation is merely regarded as a shift in location of a known element performing the same intended function of treatment application [*In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950)]. Also, Hickman as modified by David and further in view of Klaeger can be viewed as a duplication of a known element for a multiple effect performing the same intended function of chemical application. Thus providing the perpendicular nozzles taught by David with the parallel nozzle taught by Klaeger is merely duplication the nozzle of David for a multiple effect to increase the treatment coverage area for a more effective, efficient, and thorough application [*In re Harza*, 274 f.2d 669, 671, 124 USPQ 378, 380 (CCPA 1960)].

Regarding Claims 32 and 73, Hickman as modified teaches vehicle (Hickman #20) for trimming and chemically treating vegetation, comprising: a boom (Hickman #21) attached to the vehicle, a tank (David #8) attached to the vehicle for holding a chemical treatment; and an apparatus attached to an end of the boom, the apparatus comprising: at least one saw blade (Hickman #71a) for trimming the vegetation; and a sprayer (David #24) coupled to the tank by a hose for spraying the chemical treatment on the vegetation.

Regarding Claims 18, 19, and 57, Hickman as modified teaches the at least one saw blade is affixed to a saw arm (Hickman #70 and 41), and wherein the sprayer is affixed in or to the saw arm (David Fig. 1 #22 and 24).

Regarding Claims 3, 34, and 58, Hickman as modified teaches the saw blade spans above and below the saw arm, and wherein the sprayer sprays the chemical treatment above and below the saw arm (Hickman #70 and David #22).

Regarding Claims 4, 20, 21, 35, and 59, Hickman as modified teaches the sprayer comprises a plurality of nozzles formed on a top and bottom of the saw arm (David #24 Fig. 3 and Klaeger #306).

Regarding Claims 5 and 46, Hickman as modified is teaches the sprayer further includes at least one further nozzle formed perpendicularly to the plurality of nozzles, since it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely shifting a known spray outlet element to multiple locations for complete coverage of the treated vegetation from both the top and the side of the vegetation (David #24 and Klaeger #306).

Regarding Claims 6, 36, and 60, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 7, 37, and 61, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the apparatus is rotatable around the first axis (Hickman Figs. 1 and 2).

Regarding Claims 8, 38, and 62, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the apparatus is bendable at an angle with respect to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 9, 39, and 63, Hickman as modified teaches the apparatus is attachable to a boom (Hickman #21) along a first axis, and wherein the saw arm is rotatable around a second axis perpendicular to the first axis, the apparatus is rotatable around the first axis, and the apparatus is bendable at an angle with respect to the first axis (Hickman Figs. 1 and 2).

Regarding Claims 10, 40, and 64, Hickman as modified teaches the apparatus further comprises at least one jaw (Hickman #77) for grabbing the vegetation to be trimmed.

Regarding Claims 11, 41, and 65, Hickman as modified is silent on the jaws being serrated. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a notoriously well-known means of providing a strong friction grip to secure the object.

Regarding Claims 12, 17, 31, 42, 47, and 66, Hickman as modified teaches the sprayer sprays the chemical treatment at a location where the at least one saw blade trims the vegetation (David #24).

Regarding Claims 13, 26, 27, 43, and 67, Hickman as modified teaches the apparatus comprises a plurality of saw blades (Hickman #71a, 72a, 73a).

Regarding Claims 14, 44, and 68, Hickman as modified teaches a chemical treatment, but is silent on herbicide. However, it would have been obvious to one of

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ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely the selection of an alternate old and well-known chemical treatment selected in situations where one desires not to have the vegetation grow back.

Regarding Claims 22, 23, and 24, Hickman as modified teaches the sprayer assembly further comprises at least one second nozzle formed on a side of the elongated arm (David Fig. 3).

Regarding Claim 25, Hickman as modified is silent on the second nozzles pop up beyond the side of the elongated arm when activated. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely the selection of a known alternate equivalent spray head selected as a manufacturing design choice based on cost, availability of parts, etc.

Regarding Claim 28, Hickman as modified teaches at least one channel formed within the elongated arm to pass the chemical treatment to the sprayer assembly (David Fig. 3 #24 and 32).

Regarding Claim 29, Hickman as modified teaches the elongated arm comprises two pieces with the channel formed or milled therein (David Fig. 9, 11, 13, 15, 17, 21, 24, 27, 30).

Regarding Claim 30, Hickman as modified is silent on the elongated arm comprises a single piece of material and wherein channel is milled thereinto. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at

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the time of the invention since the modification is merely a manufacturing design choice for ease of manufacturing and does not present a patentably distinct limitation.

Regarding Claim 69, Hickman as modified is silent on the herbicide comprises Krenite. However, it would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely a selection of a known herbicide for intended use selected to meet certain cost parameters or availability of products.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1,3-14,17-32,34-44,46,47,55-69,72 and 73 have been considered but are moot in view of the new ground(s) of rejection.

Previously cited U.S. Patent No. 4,291,492 to Reynolds et al teaches the known chemical treatment nozzle orientation claims by applicant (Reynolds Fig. Fig. 4 #80). Thus, examiner maintains that nozzle orientation is an obvious design choice since the prior art clearly illustrates both nozzles orientated either in a parallel or perpendicular orientation to the blade plane. The design choice is based on the desire location of the treatment application.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

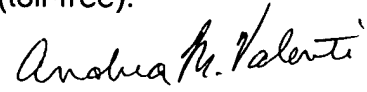
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrea M. Valenti  
Patent Examiner  
Art Unit 3643

15 December 2004



Peter M. Poon  
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